

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Please replace the paragraph beginning at page 3, lines 26 - 27, with the following amended paragraph:

Figure 2 is a partial sectional view along 2-2 ~~of one alternative embodiment~~ of the absorbent core 10 of the disposable absorbent article of Figure 1.

Please replace the paragraph beginning at page 3, lines 28-29, with the following amended paragraph:

Figure 3 is a sectional view ~~along 2-2 of one~~ an alternative embodiment of the absorbent core 10 of the disposable absorbent article of Figure 1.

Please replace the paragraph beginning at page 4, lines 5 - 6, with the following amended paragraph:

Figure 8 is a schematic top view of a strike-through plate which may be used to measure Liquid Strike ~~through~~ Through of a substrate.

Please replace the paragraph beginning at page 8, lines 29 - 31, with the following amended paragraph:

In one optional embodiment of the present invention the hydrophilic core wrap has a wash-off surface tension of greater than about 65 mN/m, when tested in accordance with the Determination of ~~surface tension~~ Surface Tension Test in the Test Methods section and further described herein.

Please replace the paragraph beginning at page 9, lines 9 - 13, with the following amended paragraph:

Figure 3 is a sectional view ~~along 2-2~~ showing a section ~~of one alternative embodiment~~ of the absorbent core 10 of the diaper of Figure 1. In Figure 3 the storage layer 60 is surrounded or enveloped by the core wrap 42. The core wrap 42 comprises a substrate which has been coated with a hydrophilicity boosting composition, both of which are exemplified in more detail herein.

Please replace the paragraph beginning at page 9, lines 14 - 20, with the following amended paragraph:

Figure 4 is a sectional view ~~along 2-2~~ showing a section of one alternative embodiment of the absorbent core 10 of the diaper of Figure 1. In Figure ~~[[3]]~~4 the storage layer 60 is surrounded or enveloped by the core wrap 42. The core wrap 42 comprises a fluid receiving top layer 70 and a bottom layer 80. The fluid receiving top layer 70 and the bottom layer 80 can be same or different. That is they may be the same substrate coated with the same hydrophilicity boosting composition, the different substrates coated with the same hydrophilicity boosting composition or different substrates coated with different hydrophilicity boosting composition, etc.

Please replace the paragraph beginning at page 14, lines 22 - 31, with the following amended paragraph:

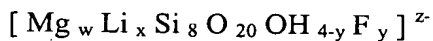
Typically the amount of hydrophilicity boosting compositions present on a core wrap substrate will vary depending upon many factors, including but not limited to, the substrate used, the nanoparticles used, the desired hydrophilicity of the durable hydrophilic core wrap, the consumer product in which the absorbent core is used, etc. Preferably, the amount of hydrophilicity boosting compositions on the core wrap substrate ~~will be present in the present invention~~ will be between about 0.01 grams of hydrophilicity boosting composition per square meter of substrate (or gsm substrate) and about 30 gsm substrate, more preferably between about 0.01 gsm substrate and about 20 gsm substrate, even more preferably between about 0.1 gsm substrate and about 10 gsm substrate. In one preferred embodiment of the present invention the nanoparticles are applied to the substrate as a dispersion in a carrier.

Please replace the paragraph beginning at page 15, lines 24 - 31, with the following amended paragraph:

Either organic or inorganic nanoparticles may be used in the hydrophilicity boosting composition of the present invention. Suitable organic nanoparticle include, but are not limited to, nanolatexes. A "nanolatex", as used herein, is a latex with particle sizes less than or equal to about 750 nm. A "latex" is a colloidal dispersion of water-insoluble polymer particles that are usually spherical in shape. Nanolatexes may be formed by emulsion polymerization. "Emulsion polymerization" is a process in which monomers of the latex are dispersed in water using a surfactant to form a stable emulsion followed by polymerization. Particles ~~are produced with~~ can range in size from about 2 to about 600 nm.

Please replace the paragraph beginning on page 16, lines 19-27, with the following amended paragraph:

In one preferred embodiment of the present invention the nanoparticles comprise a synthetic hectorite which can be a lithium magnesium silicate. One such suitable lithium magnesium silicate is LAPONITE^{[[TM]]}®, which has the formula:



wherein $w = 3$ to 6 , $x = 0$ to 3 , $y = 0$ to 4 , $z = 12 - 2w - x$, and the overall negative lattice charge is balanced by counter-ions; and wherein the counter-ions are selected from the group consisting of selected Na^+ , K^+ , NH_4^+ , Cs^+ , Li^+ , Mg^{++} , Ca^{++} , Ba^{++} , $\text{N}(\text{CH}_3)_4^+$ and mixtures thereof. (If the LAPONITE^{[[TM]]}® is “modified” with a cationic organic compound, then the “counter-ion” could be viewed as being any cationic organic group (R).)

Please replace the paragraph beginning on page 16, lines 28-30, with the following amended paragraph:

Other suitable synthetic hectorites include, but are not limited to isomorphous substitutions of LAPONITE^{[[TM]]}®, such as, LAPONITE BTM, LAPONITE STM, LAPONITE XLSTM, LAPONITE RDTM, LAPONITE XLGTM, and LAPONITE RDSTM.

Please replace the paragraph beginning at page 17, lines 15 - 16, with the following amended paragraph:

Optional ingredients - The hydrophilicity boosting compositions of the present invention may also include optional ingredients such as^{[[,]]} a carrier, surfactant and adjunct ingredients.

Please replace the paragraph beginning at page 20, lines 10 - 16, with the following amended paragraph:

At stage 170 a portion of the storage layer 60 is surrounded by the durable hydrophilic core wrap 42. Examples surrounding the storage layer 60, such as encapsulating or enveloping, ~~this~~ may be found described herein with reference to figures 2 to 6 inclusive. Lastly, at stage 180 the ends of the durable hydrophilic core wrap 42 are sealed. Suitable methods of sealing include, but are not limited to, adhesive, heat, ultrasonic and combinations thereof. The formed absorbent core may then be further processed to incorporate it into a disposable absorbent article, such as in between the

topsheet and backsheet of a disposable diaper.

Please replace the paragraph beginning at page 22, lines 6 - 17, with the following amended paragraph:

Apparatus-~~Strike-through~~Through Equipment- (i) A Funnel fitted with magnetic valve: Rate of discharge of 25ml in 3,5 (\pm 0.25) seconds; (ii) A ~~Strike-through~~Through plate: Constructed of 25 mm thick acrylic glass. The total weight of the plate must be 500 g. The electrodes should be of non-corrosive material. The electrodes are set in (4.0 mm x 7.0 mm) cross section grooves, cut in the base of the plate and fixed with quick setting epoxy resin. Figures 8, 9, and 10 illustrate a ~~Strike-through~~Through plate 200 containing electrodes 210. Figure 8 is a top view of a ~~Strike-through~~Through plate 200, where as Figure 9 is a sectional view along 9-9 of the ~~Strike-through~~Through plate 200 of Figure 8. Figure 10 is a sectional perspective view along 10-10 of the ~~Strike-through~~Through plate 200 of Figure 8; (iii) Base plate: A square of acrylic glass 125 mm x 125 mm approximately; (iv) Ring stand to support the funnel; (v) Electronic Timer measuring to 0.01 seconds; (vi) Burette with 50 ml capacity; and (vii) Core filter paper Ahlström Grade 989 or equivalent (average ~~Strike-through~~Through time 1.7s + - 0.3 s, dimensions: 10 x 10 cm).

Please replace the paragraph beginning at page 22, line 18 – page 23, line 2, with the following amended paragraph:

Procedure: (1) Carefully cut the required number of samples, 12.5cm x 12.5cm with touching the sample only at the edge of the sample. (2) Taking 10 plies of Core filter paper place one sample on the set of 10 plies of filter paper on the base plate. The sample should be positioned on the filter paper in such a way that the side of the nonwoven, which is intended to face the user's skin (when applied in an absorbent article) is uppermost. (3) Place the ~~strike-through~~Strike-Through plate on top with the center of the plate over the center of the test piece. Center the burette and the funnel over the plate. (4) Ensuring that the electrodes are connected to the timer, switch on the timer and set the clock to zero. (5) Fill the burette with saline solution (0.9 wt% NaCl in deionized water). (6) Keep the discharge valve of the funnel closed and run 5.0 ml of liquid (= one gush) from the burette into the funnel. (7) Open the magnetic valve of the funnel to discharge 5.0 ml of liquid. The initial flow of liquid will complete the electrical circuit and start the timer. It will stop when the liquid has penetrated into the pad and fallen below the level of the electrodes in the ~~strike-through~~Strike-Through plate. (8) Record the time indicated on the electronic timer. (9) Wait 60 seconds and repeat steps (4), and (6) to (9) for the

second, the third gush and any subsequent gush, with each gush comprising 5 ml of liquid. (e.g., 5ml into funnel, open magnetic valve, etc.) Record the Time for the 1st, 2nd and any subsequent gush in seconds.

Please replace Table 2 on page 23 with the following amended Table:

Table 2. ~~Strike-through~~ Through Times

Sample	Strike-through Time (seconds)		
	1st Gush	2 nd Gush	5th Gush
0.2% Laponite <u>LAPONITE</u> RD™ (Southern Clay Products)	2.5	2.8	3.0
0.1% Disperal P2™ (Condea)	2.4	2.6	2.1

Please delete the paragraph beginning on page 23, lines 9-11.

Please see a replacement (or new) abstract on the attached separate sheet